Example EA Work Plan

Introduction

This document provides an example Draft Work Plan for preparing an environmental assessment (EA) following the Utah Department of Transportation (UDOT) Environmental Task Descriptions. The purpose of the document is to help UDOT project managers develop a better understanding of what activities are required to prepare an EA so that accurate cost estimates can be developed during contract negotiations.

This document should be used as a general guideline of the activities required to prepare an EA, as a format for preparing a scope, and as guide for developing a cost estimate. Each activity in this document should be tailored for the specifics of each project while taking into account the expected issues. For example, the public involvement examples provided in this document might not be suitable for a small project in a rural area or for a very complex project in an urban setting.

To better follow the outline of a UDOT EA, this Work Plan notes which environmental task descriptions are not required for an EA and which could be combined. For more guidance on EA development, see UDOT's template for preparing an EA (available from UDOT Central Environmental).

MGT 1 – Project Management/Administration/Quality Control

A. Description of Activity

The purpose of this activity is to provide overall direction and control for the EA. The Consultant Project Manager will be responsible for team coordination, implementation of quality control measures, project reporting to UDOT, project documentation and overall performance of the project. The tasks undertaken for this activity will include the following:

- Preparation of a quality control plan and quality assurance compliance procedures.
- Preparation of project guide.
- Administration of project costs and schedule control.
- Contract compliance activities.
- Preparation of project status reports.
- Preparation of monthly progress reports describing work completed for the month and anticipated work for the following period.

B. Assumptions

Provide appropriate assumptions about number of months for the project.



C. Work Product

- Monthly progress reports.
- Monthly updated schedule.
- Meeting minutes.
- Quality assurance (QA) reports.

Activity 05E - Develop Initial Public Involvement Plan

A. Description of Activity

Develop a public involvement plan for the project that lays the foundation for meeting with all stakeholders. The plan will include the following:

- Review of existing UDOT public information regarding the project.
- Schedule of public involvement activities.
- List of initial stakeholders.
- Identify methods to be used to meet with stakeholders including elected officials, property owners, agencies, cities, businesses and the surrounding community.
- The plan will include potential media strategies and opportunities.
- Describe how the public involvement process will be documented.
- Establishment of lines of communication between consultant and UDOT.
- Development of a logo for the project.
- The plan will be updated as necessary as the process evolves.

B. Assumptions

- The consultant will have one public involvement kick off meeting with the UDOT Public Information Coordinator (PIC) regarding the format of the plan and public outreach strategies to be used.
- Provide appropriate assumptions about number of PI Plan copies.

C. Work Product

- Draft and Final PI Plan.
- Project files.
- Project logo.

Activity 07E – Form Project Team and Set Budgets

A. Description of Activity

- Discuss budget and schedule.
- Develop Project Team staffing plan, including UDOT.
- Prepare and discuss communication plan.
- Prepare and discuss Draft Project Charter.



- Prepare and discuss Draft QC/QA Plan.
- Plan team kick-off meeting with UDOT and notify team members.
- Hold Kick-off meeting and approve the project charter, QC/QA plan, and communication plan.

B. Assumptions

None

C. Work Product

- Project Team staffing plan.
- Project schedule.
- Communication plan.
- Draft Project Charter.
- Draft QC/QA Plan.

Activity 09E - Generate NOI

This activity is not required for an EA

Activity 11E – Obtain Mapping and/or Photography

A. Description of Activity

- Develop appropriate mapping and/or aerial photography for the project
- Develop project coordinate system.
- Determine approximate latitude/longitude of each aerial target to help the surveyor locate target positions in the field.
- Create PIN_ex_features dgn from aerial mapping including the following features: roadway, sidewalks, islands, drainage structures, ditches, pipes, buildings walls, signs, fences, above ground utilities, light poles, signal poles, trees and breaklines.
- Create project digital terrain file (DTM) from aerial mapping. This electronic file will be a three dimensional surface with break lines and point information.
- Conduct supplemental field survey to define features not identified from aerial mapping, including:
 - o Culverts size, material, inlet and outlet invert elevations
 - Box Culverts invert elevations, roof, wing walls, and parapets
 - Survey location and elevation of potholed utilities.
 - Check gravity utility lines at least one manhole beyond the project corridor.
- Obtain permission from property owners before entering on property.
- Obtain encroachment permit onto UDOT right-of-way.
- Coordinate with the Project Surveyor and Region Right-of-Way Engineer as necessary.



B. Assumptions

Include appropriate assumptions for project aerial photography and/or mapping.

C. Work Product

- Project survey control
- Color aerial photography
- Color ortho-rectified photos covering the proposed study area.
- Ortho-rectified imagery to be furnished on DVD in TIF format along with associated TFW georeferencing files.
- PIN_Survey.dgn files containing project survey control data.
- PIN_ex_features.dgn file containing both surveyed land based features and aerial mapped features.
- PIN_ex_coutours.dgn file containing 1' contours from aerial mapping and supplemental project surveying.
- Project DTM file from aerial mapping and supplemental project surveying.
- PIN_ex_utils.dgn files containing existing utilities from aerial and field survey.

Activity 13E – Conduct NEPA Scoping

Note: The level of effort for scoping under an EA should be based on the complexity of the project and the level of public interest. Controversial projects might require an intensive scoping effort with public meetings, while a simple EA in a rural area might require only informational letters sent to key agencies and local residents. The tasks below include a public scoping meeting.

13E 1 - Agency Scoping

A. Description of Activity

- Two methods will be used to seek agency input into the EA:
 - (1) Letter requesting information Notices will be sent to agencies regarding the project requesting input on potential issues and alternatives.
 - (2) Agency scoping partnering session Invitations will be sent to agencies and an agency scoping meeting will be held.

B. Assumptions

Provide appropriate assumptions about number of agency meetings and letters.

C. Work Product

- Agency scoping letters.
- A map detailing the project and the study area limits.
- Meeting notes detailing the agency scoping meeting.



13E 2 – Cooperating and Participating Agency Request

A. Description of Activity

- Letters will be developed requesting agencies to become cooperating or participating agencies. Participating agencies is part of SAFETEA-LU guidance.
- Cooperating/participating letters will be sent to the USFWS, Corps of Engineers, UDWR, UDNR, FEMA, USGS, and other local agencies (such as the county and cities in the project area). (note: the list should be revised based on the project and could include other agencies such as EPA, BLM, Forest Service, SITLA, etc.)

B. Assumptions

Provide appropriate assumptions about number of letters.

C. Work Product

Cooperating and participating agency letters.

13E 3 - Inform Stakeholders of Scoping

A. Description of Activity

A stakeholder forum will be established (see Activity 38E, Implement Public Involvement Plan) with mechanisms for contacting stakeholders.

- Key stakeholders (such as local officals, businesses, and organizations) will be contacted with a personal phone call and a follow up letter of invitation
 - An announcement will be placed with the utility bill for all businesses and households in the project area.
 - A project newsletter / postcard of invitation will be mailed to the businesses and households in the project area.
 - o A display ad and a legal notice will be placed in appropriate newspapers.
 - Door hangers will be placed at residences that would be directly impacted by the project.
 - o A project website will be developed.
 - Local cities will be asked to provide information and link the project's website to their city websites.
 - An invitation will be sent home with students who attend schools in the project area.
- The consultant will assist UDOT by drafting press releases or public service announcements (PSAs).

B. Assumptions

 Provide appropriate assumptions about number of utility announcements, newsletters, postcard invitations, and door hangers.

C. Work Product

- Utility bill announcement
- Project newsletter invitation



- Project postcard Invitation
- Display ad
- Legal notice
- Door hanger
- Web Page
- School flier
- Press Release

13E 4 - Hold Public Scoping Meetings

A. Description of Activity

- Public scoping meeting (s) will be held at a central location in the project corridor.
 Meetings will be designed with break-out work groups to maximize stakeholder participation.
- Input will be sought on the project purpose and need and potential alternatives to meet the intent of SAFETEA-LU.
- Input sought will identify community values and provide information for the community assessment.
- Display boards will be used to educate the public on the regulatory process, 4(f) issues, and the project.
- Participants will be given a project meeting information packet.

B. Assumptions

Provide appropriate assumptions about number of display boards and meeting packets.

C. Work Product

- Meeting Packet
- Display Boards

13E 5 - Document Scoping Process

A. Description of Activity

- The consultant will work with UDOT to develop a content analysis comment method approach to categorize comments received during the scoping process.
- The consultant will document all scoping process activities and will provide UDOT with a scoping report.

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

Draft and final scoping report.



Activity 15E – Develop Project Context

A. Description of Activity

The scope of the project will be developed including existing and future forecast traffic volumes, existing and proposed utilities, and planned land use and transportation improvements in the area. This information will be derived from scoping meetings and existing data collection. The tasks for this activity include the following:

- I Inventory the following items: utilities, roadway geometric features, condition of existing safety facilities, signing, condition and structure of the existing pavement, condition of existing structures, boxes, culverts, bicycle and pedestrian facilities, and other pertinent features.
- Evaluate capacity and congestion problems and review signal requirements.
- Develop existing and future traffic (design year) traffic projections; including average annual daily traffic (AADT) volumes for the corridor and P.M. peak hour volumes for the existing signalized intersections. Conduct PM traffic counts for key intersections.
- Collect accident data for the project.
- Identify existing right-of-way lines and properties.
- Research county ownership maps to verify individual properties abutting the project corridor.
- Meet with the UDOT Region Pavement Engineer to review any existing test data or pavement condition studies of the highway pavement. Use the available data to revise the proposed field testing and investigation program. Review the program with the UDOT Region Pavement Engineer and incorporate any review comments.
- Perform a field testing and investigation program consisting of pavement deflection tests with a falling weight deflectometer (FWD), obtaining cores of the asphalt concrete surfacing, and borings to evaluate the thickness of the pavement section components and obtain samples of the subgrade soils.
- Perform laboratory tests on representative samples of the subgrade soils to classify and evaluate the strength characteristics of the subgrade soils.
- Evaluate the FWD, field, and laboratory data to determine the resilient moduli of the pavement surfacing, base, and subgrade and evaluate the structural characteristics of the pavement section(s).
- Identify the existing design deficiencies based on existing roadway conditions.
- Prepare a report of existing roadway conditions.
- Prepare plans that show all existing roadway features for use in scoping meeting.
- Establish logical termini.
- Develop scoping meeting minutes and an Engineer's Estimate showing preliminary estimated budget.
- Inventory utilities within the project corridor and develop existing utilities from field and 3rd party hard/electronic mapping information.

B. Assumptions

As-built plans for the existing roadways and railroad will be provided at no cost.



- Utilities will be placed in the PIN_ex_util.dgn in their approximate location from field survey of bluestake marking or based on mapping and information provided by 3rd party utility companies.
- Utilities may be potholed at the department's request, but potholing is not included in this scope of work.
- Ownership will be obtained from tax records in the form of legal descriptions.

C. Work Product

- Daily average daily traffic (ADT) forecasts for the no-action and metropolitan planning organization (MPO) Long Range Transportation Plan.
- PM Peak hour forecasts and intersection LOS for existing and design year no-action conditions.
- Preliminary needs inventory report.
- Plans that show existing roadway, utility and railroad features.
- Scoping Meetings and minutes.
- Boring logs, laboratory test results, reduced FWD data, and pavement structural numbers at each FWD test location.

Activity 17E – Define Project's Draft Purpose and Need

17E 1 – Prepare Draft Purpose and Need

A. Description of Activity

The activity will include development of the project purpose and need using data from Activity 15 E, Develop Project Context. Public input will be sought on the project purpose and need during initial scoping and in subsequent stakeholder meetings to meet the intent of SAFETEA-LU. At the initial scoping meeting a brief overview of the project need will be provided to the public while requesting additional input.

- Prepare the draft purpose and need.
- Collect land use and transportation data from local governments, MPO, and UDOT.
- Collect social data such as growth, housing, employment, and community values.
- Review transportation connectivity to include other forms of transportation such as transit, airports, and pedestrian/bicycle.
- Review existing environmental documents in the project area to ensure projects are consistent.
- Include existing and future travel modeling under no-action conditions and existing accident information (note: data gathering and travel demand modeling should be conducted as part of Activity 15E, Develop Project Context).
- After comments are incorporated, a draft will be prepared for FHWA review.

B. Assumptions

 Local government land use plans are adequately included in the MPO regional travel demand model to the future year conditions.



- Future growth estimates to the project design year will be obtained by local governments and incorporated in the regional model through cooperation with the MPO staff.
- A "no-action" transportation network will be developed by incorporating transportation plans in the area not including the project.
- Land use and transportation plans are readily available from local governments.
- Provide appropriate assumptions about number of purpose and need copies.

C. Work Product

- Preliminary Draft Purpose and Need Chapter for internal distribution to UDOT.
- Draft Purpose and Need for FHWA review.

17E 2 - Public Review of Project Purpose and Need

A. Description of Activity

- To meet the intent of SAFTEA-LU guidance this activity will include review of the project purpose and need.
- Review will occur during the public scoping meeting (or at other meetings developed in Activity 38E, Implement Public Involvement Plan).
- News letters and website information will include the project purpose and need and the request for comments.

B. Assumptions

None

C. Work Product

Summary report and/or memorandum of public input to the project purpose and need.

Activity 19E – Identification and Initial Development of Alternatives

A. Description of Activity

- Through the public involvement process obtain input on the alternatives to consider and seek comment on the alternatives to carry forward for detailed study to meet the intent of SAFETEA-LU.
- Develop initial list of alternatives through public and agency scoping and coordination with UDOT and FHWA.
- Develop design options and alternatives for the corridor including:
 - Horizontal and vertical alignments.
 - o Intersection improvements.
 - Typical sections.
 - Drainage onsite and offsite conveyance, water quality, and detention alternatives.
 - Retaining wall vs. slope easement alternatives.
 - Access Management alternatives.
 - Coordinate pavement alternatives with UDOT.



- Develop and evaluate global options and alternatives such as transit and transportation system management (TSM) (dependent on project area).
- Develop screening criteria in coordination with UDOT to evaluate initial list of alternatives and to determine alternatives to carry forward for detailed study.
- Prepare for and hold a team meeting to present alternatives and select alternatives to carry forward for detailed study using the screening criteria.
- Conduct appropriate travel demand modeling for the build alternatives.
- Conduct appropriate level of design (cross section, alignment, cut and fill, stormwater) for alternatives carried forward to analyze impacts to the human and natural environment. The design will provide sufficient detail to determine right-of-way impacts.
- Prepare a comparison of impacts for alternatives considered in detail.
- Develop avoidance alternatives for wetland and 4(f) impacts.
- Develop impacts to utilities
- Develop impacts to property owners from right-of-way needs.
- Prepare the alternatives chapter based on screening process and alternatives considered in detailed in the EA.

B. Assumptions

- Preliminary alternatives can be screened using items such as traffic forecasts, cost, consistency with land use and growth objectives, community values, and environmental screening factors (or other factors appropriate for the project).
- Provide appropriate assumptions about number of alternative chapter copies.

C. Work Product

- Draft and final alternatives chapter for internal distribution to UDOT and lead federal agency.
- Stormwater and design technical reports.

Activity 21E/25E – Environmental Resource Identification and Determine and Analyze Impacts, Refine Alternatives as Necessary

Note: Under UDOT guidance an EA is prepared with the affected environment and environmental consequences in a single chapter. Therefore, Activity 21E, Affected Environment and Activity 25E, Determine and Analyze Impacts and Refine Alternatives as Necessary have been combined into a single activity.

Note: Because the EA should be focused, some of the resources identified below might not require a detailed environmental analysis. Therefore, modify the work plan according to the anticipated scope of the project. For example, if there are no farmlands or floodplains in the project area, then no analysis would be required.



21E/25E 1 - Land Use

A. Description of Activity

Affected Environment

- Current and future land use and zoning within and adjacent to the project will be described as detailed in local, state, and federal land use plans.
- Existing land use will be described based on field survey of the project area.
- Existing land use, future land use, and zoning figure (s).

Environmental Consequences

- Analyze impacts to existing land use, future land use plans, and zoning.
- Determine the consistency of the project to land use plans and zoning
- Determine mitigation measures
- Indirect and growth related impacts are addressed under 21E/25E 23, Indirect Impacts

B. Assumptions

 Land use plans and zoning data are readily available from local, state, and federal sources.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E E 2 - Farmland

A. Description of Activity

Affected Environment

- The agricultural setting will be defined in terms of prime, unique, and state important farmlands. Data on Century farms will also be described.
- The type of farmland activities, size of farm, and production rate will be described from field verifications.
- Agricultural protection areas will be listed.

Environmental Consequences

- Analyze potential impacts to prime, unique, and state important farmland.
- Evaluate impacts to agricultural protection areas.
- Analyze potential indirect impacts resulting from partial loss of farm land including water sources and structures
- Prepare Farmland Impact Rating Form AD-1006 (if necessary for farmland outside of city boundaries)
- Determine mitigation measures
- Farmland figure(s).

B. Assumptions

- NRCS data will be used for prime and unique farmland determinations.
- Data on agricultural protection areas is available from the cities and counties.
- Field verifications will be conducted.



C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 3 – Community Impacts (Social)

Note: This effort should be conducted under Activity 27E, Community Impact Assessment. The community impact assessment report should be written so that it can be easily incorporated into the EA to avoid duplication of effort).

A. Description of Activity

- This activity will include a description of the social setting to include community cohesion; quality of life; public safety; public services and utilities; recreation; and relocations.
- See Activity 27E, Community Impact Assessment for more details.

B. Assumptions

See 27 E, Community Impact Assessment

C. Work Product

 Affected environment/environmental consequences should be written under Activity 27E, Community Impact Assessment.

21E/25E 4 – Environmental Justice

A. Description of Activity

Affected Environment

- Collect environmental justice data from census, community service providers, cities, counties, EPA environmental justice website, and schools.
- One-on-one meetings will be conducted with organizations such as community service providers, cities, and counties to refine data.
- Questionnaires and other methods will be used during stakeholder meetings to refine data.
- Detailed description of low-income and minority populations in the project area.
- Environmental justice figure(s).

Environmental Consequences

- Analyze potential impacts to low-income and minority populations
- Through the public involvement effort, work with environmental justice communities to develop ways to minimize impacts.
- Develop mitigation measures.

B. Assumptions

None

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.



21E/25E 5 - Transportation

A. Description of Activity

Affected Environment

- Baseline data to describe existing travel demand and level of service for the project and connecting arterials or other major roadways (*note*: Data should be provided from Activity 15E, Develop Project Context and Activity 17E, Define Project's Draft Purpose and Need)).
- General description of existing roadway classification.
- Transportation figure(s).

Environmental Consequences

- Analyze potential impacts to other arterials (or other types of transportation facilities) along the project from roadway improvements. Build impacts will be compared to the No-Action to determine how the project will change travel patterns.
- Temporary construction impacts will also be evaluated.
- Develop mitigation measures

B. Assumptions

None

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 6 - Economics

A. Description of Activity

Affected Environment

- Baseline data will be collected for local retail sales, property tax revenue, sales tax revenue, and property values for each city and/or county.
- General description of the economic makeup of each community and the areas surrounding the project to provide a context for the corridor.
- Some data will be collected as part of (during) the public involvement process.
- Economics figure(s).

Environmental Consequences

- Analyze potential economic impacts from alternatives to existing tax base, revenues (sales and property), employment, changes in business oriented land uses, and the permanent and temporary loss of businesses and business access, respectively.
- Evaluate direct and indirect economic benefits including the value of time.
- Qualitatively analyze the change in property values from roadway improvements including noise related impacts.
- Develop mitigation measures.

B. Assumptions

Data is readily available from census, local MPO, cities, counties, and State.



C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 7 – Joint Development

A. Description of Activity

Affected Environment

- A description of joint development will be provided and what opportunities may be available within the communities.
- Data will be collected from the cities, counties, State, and local MPO.

Environmental Consequences

 Evaluated potential joint development opportunities with other projects proposed along the project area. This could include trails, parks, city and county projects, and improved access to public facilities.

B. Assumptions

None

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter..

21E/25E 8 – Consideration Related to Pedestrians and Bicyclists

A. Description of Activity

Affected Environment

- Data will be collected on pedestrian, bicycle, and trails from public, cities, counties,
 State, and local MPO. Existing and future data will be collected.
- Use and connectivity of trails will be detailed.
- Pedestrians and bicyclist figure(s).

Environmental Consequences

- Analyze potential impacts from project alternatives on pedestrian and bicycle facilities.
 Impacts to existing and planned facilities will be evaluated.
- Develop mitigation measures.

B. Assumptions

 Existing and future trails data will be available from land use plans, trail plans, and local MPO or other appropriate agency.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 9 – Air Quality

 A. Description of Activity <u>Affected Environment</u>



- Existing conditions information will be collected from monitors in the project area, the state of Utah website, Division of Air Quality, local MPO, and other environmental documentation prepared in the project area.
- Statutory provisions affecting air quality resulting from SAFETEA-LU and other recent guidance (e.g., mobile air toxics, PM2.5) will be described.
- The air quality attainment status for priority pollutants in the project area will be described.

Environmental Consequences

- The air quality analysis involves obtaining traffic data, calculation of carbon monoxide (CO) and ozone precursor (nitrogen oxides and hydrocarbons/volatile organic compounds) emissions for existing and future year conditions, and calculation of CO impacts via dispersion modeling.
- A qualitative discussion of construction related impacts on particulate matter will be provided.
- Impacts associated with operation of the project will be quantified using generally accepted air quality models (such as CAL3QHC and MOBILE6) and procedures.
- In non attainment areas address local project conformity at intersections or interchanges that operate at LOS of D, E, or F by modeling current and future emissions at those locations.
- Use CAL3QHC to perform CO "hotspot" analysis for intersections that operate at an LOS of D, E, or F. Predicted CO levels will be compared to national ambient air quality standards to determine the level of impact.
- Incorporate guidance and procedures from FHWA and EPA in place at the time of the analysis with respect to mobile air toxics, PM2.5, and other air quality provisions resulting from SAFETEA-LU.

B. Assumptions

- Air quality data is readily available.
- No air monitoring will be conducted.
- Provide appropriate assumptions about number of hot spot analysis.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 10 - Noise

A. Description of Activity

Affected Environment

- A detailed description of existing noise conditions along the corridor will be conducted.
- Noise levels at sensitive receptors will be detailed in text with locations shown on maps.
- Short-term (15-minute) noise monitoring will be conducted at sensitive receptors. Selection of noise sensitive receptor locations will be based on reconnaissance-level field surveys, aerial photographs of the alignments, and professional judgment while in the field. Traffic volumes will be videotaped during each monitoring period (if required).



 Noise monitoring will be conducted during peak noise periods, typically when traffic volumes are free-flowing.

Environmental Consequences

- A noise impact analysis will be prepared to document existing and project-related noise levels in the study area. The analysis will be prepared consistent with FHWA and UDOT methodologies and mitigation procedures.
- Estimate current and future noise levels (L_{eq}) using the most recent version of FHWA's Traffic Noise Model (TNM). Modeling will include noise levels for the existing year and the design year for the Build and No-Action conditions.
- Recommend reasonable and feasible mitigation based on current UDOT Policy.
- Discuss construction-related impacts.
- Develop noise contour maps.

B. Assumptions

- No 24 hour monitoring will be conducted.
- Provide appropriate assumptions about number of sensitive receptors to be monitored for noise.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 11 – Water Quality

A. Description of Activity

Affected Environment

- An overview of existing canals, streams, and subsurface water sources in the study area will be provided.
- Existing drainage conditions along the project will be provided.
- A description of impaired waters and water quality data will be described.
- Water quality figure(s).

Environmental Consequences

- Analyze potential impacts to water quality from project alternatives including any impaired waters, surface waters, and subsurface waters.
- The evaluation will include impacts from foreseeable events attributable to implementation of the roadway alternatives (e.g., de-icing practices and stormwater runoff).
- Provide a quantitative analysis of water quality impacts from increases in impervious surfaces.
- Evaluate engineering controls that mitigate impacts.
- Develop mitigation measures

B. Assumptions

- Water quality data are readily available from the Department of Water Quality or other sources.
- No water quality monitoring will be conducted.



C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 12 – Ecosystems (Wetlands, Wildlife, Threatened and Endangered Species, and Invasive Species)

A. Description of Activity

Affected Environment

- This activity will describe the existing wetlands, wildlife, vegetation, wildlife habitat, and threatened and endangered species along the project corridor. The resources are combined to provide a description of the ecosystem.
- A field survey of the project area will be conducted to detail wildlife and vegetation of the corridor. The field survey will include a review for any potential threatened and endangered species.
- Provide an overview of any invasive species.
- A wetland survey will be conducted. If found, a formal delineation of wetlands will be conducted.
- Data will be obtained from Utah Heritage database, Universities, Division of Wildlife, and USFWS.
- Any existing wetland data will be obtained from the Corps and NWI maps.
- A map will be prepared in GIS detailing habitat and vegetation types and location of any wetland and threatened and endangered species.
- Coordination with the USFWS, Corps, and Department of Wildlife will be conducted to develop any methodologies and to obtained data.
- Ecosystem figure (S).
- Field surveys will be conducted for an area necessary to evaluate impacts from the project (select appropriate survey distance based on project) on either side of the corridor. A general overview of the project area will be based on aerial photographs and windshield surveys.

Environmental Consequences

- Evaluate impacts to wetlands, wildlife, vegetation, and threatened and endangered species from the project alternatives.
- Evaluate impacts to wildlife corridors and habitat fragmentation.
- If necessary, coordinate with the Corps regarding wetland impacts, least damaging practicable alternative, and 404 permits. Develop appropriate mitigation sites and plan for any impacted wetlands.
- Coordinate with USFWS and DWR regarding wildlife and threatened and endangered species impacts and develop impact methodology.
- Evaluate the impacts from noxious weeds (invasive species).
- Develop mitigation measures

B. Assumptions

None

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.



- Wetland delineation (if necessary).
- Wetland plans (as necessary)
- Field survey report detailing methods.

21E/25E 13 - Floodplains

A. Description of Activity

Affected Environment

- Existing floodplains in the project area will be described along with FEMA floodplain data.
- Data will be collected from FEMA and county floodplain maps
- Floodplain figure (s).

Environmental Consequences

- Analyze potential impacts to floodplains from alternatives based on regulatory requirements.
- Evaluate engineering controls to minimize impacts.
- Develop mitigation measures.

B. Assumptions

- Flood plain data is readily available from FEMA. No floodplain mapping will be conducted.
- For floodplain impacts a development permit will not be submitted and no mapping revisions prepared.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 14 - Cultural Resources

A. Description of Activity

Affected Environment

- Cultural resources include historical and prehistoric resources such as archaeological sites, historic structures (e.g., railroads and canals), and buildings.
- Paleontological resources include fossils or trace fossils of past plant and animal life.
- Conduct a search of site and project files at the Utah State Historic Preservation Office (SHPO);
- Conduct a pedestrian inventory for archaeological resources;
- Conduct a selective Reconnaissance Level Survey (RLS) for historical architectural properties;
- Prepare National Register of Historic Places (NRHP) eligibility recommendations for all documented resources;
- Prepare a technical report and supporting forms and graphics outlining the results of the archaeological and architectural surveys;
- Consult with the Utah Geological Survey (UGS) regarding paleontological resources within the study corridor(s);



- Consultation with the Local Government contact(s) and other community level historical societies (if identified) regarding known and potential cultural resources within the project corridor(s) and the relative historical importance of resources identified within the respective communities during field inventories;
- Assist UDOT in consulting with Native American tribes;
- Prepare a summary report outlining the results of Native American consultation;
- UDOT Guidelines for Archaeological Survey and Testing (14 July 2000) shall be followed:
- A UDOT Field Authorization Form shall be requested and received prior to fieldwork;
- A search of the site and project files of the SHPO will be required for the entire project corridor;
- A paleontological file search and clearance letter for the project area shall be requested from UGS at the time the UDOT fieldwork authorization is requested.
- A selective RLS for buildings will be necessary to identify historical architectural properties that could be impacted by project alternatives. This survey will be done in compliance with Section 4 (f) evaluation of the Department of Transportation Act of 1966 and the RLS guidelines of the Utah SHPO and will include the new SHPO provision for using digital photographs;

Environmental Consequences

- Assess impact of project alternative(s) on cultural and paleontological resources identified as eligible for the NRHP;
- Assist in the preparation of the Section 4(f) evaluation;
- Assist the UDOT in negotiating and preparing a draft Memorandum of Agreement (MOA) to resolve adverse impacts.

B. Assumptions

 Provide appropriate assumptions about number of archaeological and historical sites to be discovered and evaluated.

C. Work Product

- One technical report outlining the results of the archaeological and architectural field inventories. This document will include at least the following sections: a summary of previous research in the area; cultural context of the project area; survey results; results of Native American consultation; and IMACS forms (including photographs, documentation, and detailed site sketch maps) for all recorded archaeological sites and Reconnaissance Level Survey database printouts and digital contact sheets for all architectural properties identified during the field inventories. All previously documented sites will be addressed as directed by the UDOT and either existing site forms or updated site forms will be provided as appropriate. Up to three versions (draft, draft final, and final) of the report and six copies of each of those versions will be provided to the UDOT:
- Paleontological consultation letter obtained from the UGS regarding known or potential fossil localities and resources within the project corridor. This letter will be submitted as an appendix to the cultural resources technical report;
- Draft Native American consultation letters will be provided to the UDOT for their finalization and submittal to the appropriate tribes;



- One summary report of Native American consultation efforts, including copies of the consultation letters and communications records for follow-up phone calls, will be provided. Up to three versions (draft, draft final, and final) of the report and six copies of each version will be provided to the UDOT;
- Draft and final versions of the Affected Environment/Environmental Consequences chapter for the Historical, Archaeological, and Paleontological section(s) of the NEPA document.
- A draft MOA will be prepared, if requested by the UDOT, and submitted to the UDOT for finalization and routing.

21E/25E 15 - Hazardous Waste

A. Description of Activity

Affected Environment

- Existing hazardous waste sites along the project area will be described to include both surface and subsurface sites.
- A search of federal, state, and county environmental data bases will be conducted.
- If necessary, historical aerial photographs will be obtained (1950-2004 as available in 5year increments).
- A reconnaissance survey of the study area will be conducted.
- Hazardous waste figure (s).

Environmental Consequences

- Analyze potential impacts to hazardous waste sites from alternatives including operation and construction.
- Provide UDOT with information regarding any sites that may impact construction and provide appropriate recommendations to resolve issues.
- Evaluation of existing lead from vehicles will be qualitative.
- Mitigation measures will be developed.

B. Assumptions

No soil sampling or other field investigations will be conducted.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 16 - Visual Resources

A. Description of Activity

Affected Environment

- A description of the existing visual environment will be provided along with photographs of the project area.
- Visual figure (s).

Environmental Consequences

- Analyze potential impacts to visual resources from alternatives.
- Evaluation of impacts will follow FHWA guidelines



- Visual renders will be used to determine impacts and as part of the public involvement effort (if necessary).
- Mitigation measures will be developed.

B. Assumptions

Provide appropriate assumptions about number of visual renderings.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 17 - Wild and Scenic Rivers

A. Description of Activity

Affected Environment

- A description of any listed or potential wild and scenic rivers will be provided.
- Wild and scenic river figure (s).

Environmental Consequences

- Analyze potential impacts to wild and scenic rivers from alternatives.
- Mitigation measures will be developed.

B. Assumptions

None.

C. Work Product

Preliminary draft of the affected environment/environmental consequences chapter.

21E/25E 18 – Energy Impacts

A. Description of Activity

- Analyze the potential impacts from the project alternatives on energy consumption.
- A quantitative analysis will be performed for each alternative based on travel demand modeling projections.
- Construction impacts will be evaluated.

B. Assumptions

None

C. Work Product

Preliminary draft of the environmental consequences chapter.



21E/25E 19 - Construction Impacts

A. Description of Activity

- Analyze temporary impacts associated with construction. Impacts will include access, traffic, water quality, noise, dust/air quality, safety, visual, and vibration.
- Construction hauling methods, staging areas, phasing, and material pits will be discussed in general terms.
- Mitigation measures will be developed.
- Determine impacts to property owners abutting the project corridor due to temporary construction access

B. Assumptions

None

C. Work Product

Preliminary draft of the environmental consequences chapter.

21E/25E 20 - Permits and Clearances

A. Description of Activity

- A table showing the potential permits and clearances that would be required from project alternatives will be developed.
- A general description of each permit and clearance will be provided.

B. Assumptions

No permits will be obtained.

C. Work Product

Draft permits and clearances section

21E/25E 21 - Mitigation Summary

A. Description of Activity

Prepare a summary chapter of all of the mitigation commitments will be provided.

B. Assumptions

None

C. Work Product

Draft mitigation summary section

21E/25E 22 - Cumulative Impacts

A. Description of Activity

Analyze potential cumulative impacts from project alternatives.



- Analysis will include identifying potential significant issues to be considered and identify temporal and geographic boundaries.
- Significant issues to evaluate will be developed in coordination with UDOT, FHWA, and resource agencies.
- Temporal boundaries will be based on available information

B. Assumptions

None

C. Work Product

Preliminary draft cumulative impact section.

21E25E 23 - Indirect Impacts

A. Description of Activity

- Analyze potential indirect (growth related) impacts from the project alternatives.
- Data will be collected from local government agencies to determine how the area will develop with and without the project.
- Maps will be developed comparing the no-action and build alternatives.
- Analysis will include an evaluation of travel demand changes.
- Indirect impacts will be determined in coordination with developers and local governments.

B. Assumptions

None

C. Work Product

Preliminary draft indirect impacts section.

21E/25E 24 - Refine Alternatives

A. Description of Activity

- Based on environmental consequences data the alternatives will be revised to minimize potential major impacts to resources such as 4(f), wetlands, threatened and endangered species, and community values.
- Input from UDOT, FHWA, resource agencies, and the public will be used to refine alternatives.
- Alternative refinement will include measures to reduce costly mitigation.
- After refinement the detailed alternatives to be evaluated in detail will be developed.

B. Assumptions

None

C. Work Product

Refined alternatives to be evaluated in detail



Activity 23E - 4(f) Analysis

A. Description of Activity

- Develop a 4(f)/6(f) chapter for the EA.
- The analysis will use recent SAFETEA-LU guidance.
- The analysis will include the development of avoidance and minimization measures.
- An understanding the social and economic make-up of the community will be developed to assist in reviewing avoidance alternatives. Land use and transportation plans will also be considered.
- Coordinate with property owners with jurisdiction over potential 4(f) properties to determine property importance and to refine boundaries. Obtain written concurrence from public property owners (cities, county, state, and federal).
- Cultural Resource data and historical boundaries will be developed as part of Activity 21E 14, Cultural Resources.
- Develop avoidance alternatives and measures to minimize harm.

B. Assumptions

Provide appropriate assumptions about number of 4(f)/6(f) sites to be evaluated.

C. Work Product

- Technical memorandum describing avoidance alternatives for approval by UDOT and FHWA.
- Preliminary draft 4(f) chapter for review by UDOT and FHWA.

Activity 25E – Determine and Analyze Impacts, Refine Alternatives as Necessary

Note: This activity is included under Activity 21E.

Activity 27E – Community Impact Analysis

Note: This activity will provide the information necessary to complete the social sections for the EA. The Community Impact Assessment Report should be written so that it can be easily incorporated into the EA. Avoid duplication of effort between the social sections of the EA and public outreach efforts.

A. Description of Activity

- This activity will include developing an understanding of community values so context sensitive solutions can be implemented.
- Data will be collected through the public involvement process (see Activity 38E, Implement Public Involvement Plan).



- Data will be collected through questionnaires, specific input process during public meetings, and discussions during stakeholder forums.
- Photographs will be used to develop an understanding of community values.
- Community values input will come from the public, cities, service providers, and religious organizations.
- Alternatives will be evaluated to determine the impact on community values and potential context sensitive solutions and mitigation measures developed.
- Mitigation measures will be developed in coordination with the stakeholders.
- List impacts due to right-of-way acquisition from property owners abutting the project corridor

B. Assumptions

The public involvement effort will be used to obtain community data.

C. Work Product

Community Assessment Technical Memorandum.

Activity 29E – Prepare Draft Document

29E 1 - Assemble Draft EA

A. Description of Activity

 This activity will include assembling the individual sections and chapters of the document including technical editing and word processing.

B. Assumptions

This activity will include mainly technical editing and word processing

C. Work Product

Draft EA.

29E 2 - Comments and Coordination

A. Description of Activity

 This chapter will summarize the public and agency involvement process prior to release of the EA.

B. Assumptions

None

C. Work Product

The comments and coordination chapter.



29E 3 - List of Preparers

- A. Description of Activity
 - The list of prepares will include all personnel responsible for the content of the EA.
- B. Assumptions
 - None
- C. Work Product
 - List of preparers chapter of the Draft EA.

29E 4 - References

- A. Description of Activity
 - References for all documents, contacts, and websites used to develop the EA.
- B. Assumptions
 - None
- C. Work Product
 - Reference chapter of the Draft EA.

29E 5 - Distribution List

- A. Description of Activity
 - A public and agency distribution list for the EA will be developed.
- B. Assumptions
 - None
- C. Work Product
 - Distribution chapter of the EA.

29E 6 - Pertinent Correspondence and Appendices

- A. Description of Activity
 - A pertinent correspondence and appendices as appropriate will be developed.
- B. Assumptions
 - None
- C. Work Product
 - Pertinent correspondence and appendices of the EA.



29E 7 - Draft EA Review and Comment

- A. Description of Activity
 - A preliminary Draft EA will be provided to UDOT for review.
 - UDOT comments will be incorporated.
 - Comment and response form will be prepared.
 - After UDOT comments are incorporated, a copy of the Draft EA will be provided to FHWA Utah review.
 - Comment and response form to FHWA comments
- B. Assumptions
 - Provide appropriate assumptions about number of copies.
- C. Work Product
 - Preliminary and Draft EA for UDOT and FHWA.
 - Comment and response form.

Activity 31E - Internal QC/QA of EA

31E 1 - Internal QC/QA and Technical Edit

- A. Description of Activity
 - This activity will include an internal review of the Draft EAs.
 - Technical editing is included under Activity 29E -1, Assemble Draft EA.
 - Independent NEPA specialists will review the document for quality and consistency among sections.
 - The internal review will include methods to streamline the EA and make it more reader friendly.
 - The EA will be revised prior to the document being provided to UDOT (See Activity 29E-7, Draft EA Review and Comment) for their initial review.
- B. Assumptions
 - None
- C. Work Product
 - Internal QC/QA comments to the EA.

31E 2 – UDOT Internal Legal Sufficiency Review

- A. Description of Activity
 - This activity will be conducted by a UDOT attorney during the Draft EA review.
- B. Assumptions
 - None



C. Work Product

None.

Activity 33E - Pre-Legal Sufficiency Review

Note: This activity only applies if the EA has a non-programmatic Section 4(f).

A. Description of Activity

- A Draft EA will be prepared for FHWA legal review.
- All comments from FHWA will be reviewed and appropriate revisions made to the Draft EA.

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

Responses to FHWA comment form.

Activity 35E - Conduct Public Meeting on EA

Note: A public meeting to disclose the impacts of the EA may not be required depending on the scope of the project. Consult with UDOT Central Environmental and FHWA to determine if a public meeting is required for the project. If no meeting is required appropriate notice of release of the EA is still required in local and regional newspapers. The activities below are for holding a public meeting.

35E 1 – Coordination to conduct and schedule public meeting

A. Description of Activity

- An announcement will be placed with the utility bill and sent to all citizens in the project area (if appropriate).
- A project newsletter invitation will be mailed to the citizens in the project area and on the project mailing list.
- A display ad and a legal notice will be placed in appropriate newspapers
- The project web page will be updated and will provide meting information
- An invitation will be sent home with students attending the elementary and middle schools in the project area
- The consultant will write Public Service Announcements (PSAs)
- Translation of public involvement material into Spanish (if required for the project area)
- The consultant will hire a court reporter.
- The consultant will arrange for the public meeting location



B. Assumptions

 Provide appropriate assumptions about number of copies of public involvement materials.

C. Work Product

- Utility bill announcement
- Project newsletter invitation
- Project postcard Invitation
- Display ad
- Legal notice
- Web Page
- Public Service Announcements
- School flier
- Press Release
- Meeting plan
- Updated press kit

35E 2 – Prepare Graphics, Handouts, and Presentations

A. Description of Activity

- Preparation of material for the public meeting.
- Aerials with the alternatives will be developed for the meeting.
- Boards will be prepared to display project information.
- Comment form will be developed

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

- Display material and handouts including maps.
- Comment forms.
- Display boards.
- Copies of a summary of project impacts flier.
- Aerial photography showing project alternatives.

35E 3 – Conduct Meeting and Prepare Transcripts

A. Description of Activity

- This activity includes the open house and preparation of transcripts.
- Prepare UDOT's public hearing certification documentation
- A dry run will be required.
- The consultant will provide 6 staff members (select appropriate number for the project) to attend the meeting.
- The transcript will be limited to oral testimony given at the hearing.
- Written comments will be invited.
- The open house and hearing will be from 4 to 7 pm (select appropriate time for project)



B. Assumptions

Provide appropriate assumptions about number of meetings.

C. Work Product

 Transcript and public hearing certification documentation which will include handouts, written comments, attendance lists, oral testimonies, copies of newspaper ads, etc.

Activity 37E – Public and Agency EA Document Review

Note: The EA need not be circulated for comment, but the document must be made available for public review at the applicant's office and FHWA. Placing the EA in other locations such as libraries along the corridor may also be appropriate.

37E 1 – Prepare agency, library, and public distribution letters

A. Description of Activity

- A notice of release of the EA will be prepared for agencies.
- A notice of release of the EA and where it may be viewed will be provided to the public.
- Letters submitting the document to libraries or other locations along project area will be prepared.

B. Assumptions

None

C. Work Product

Notice of release of EA.

37E 2 –EA Printing and Distribution

A. Description of Activity

- The EA will go through a final QC and be submitted for printing.
- Distribution of the EA will be made to agencies.
- EA will be placed on the project website and made available at UDOT, FHWA, local libraries and copy centers.

B. Assumptions

Provide appropriate assumptions about number of EA and CD copies.

C. Work Product

Public EA



Activity 38E – Implement Public Involvement Plan

Note: This is only an example of some of the public involvement activities that could be used for a project. Identify the appropriate method for each specific project.

38E 1 – Develop and Maintain Public Website

A. Description of Activity

 The consultant will design, develop and maintain a project web page with the goal to educate, update and provide an additional venue for community input.

B. Assumptions

The web page will be used through the duration of the project

C. Work Product

Web page

38E 2 – School Project (if appropriate for the project)

A. Description of Activity

- To better engage the schools currently on the corridor, develop a school project that involves both students and parents and helps identify safety concerns and solutions. The project will be designed to not only gain information but to educate the communities' children on transportation and environmental issues. Work closely with the school district to maximize efforts. Keep school staff informed through project presentations and updates.
- The consultant will work directly with school teachers to give classroom presentations during key points of the project, regarding UDOT, the NEPA regulatory process and this project.
- The consultant will sponsor a Corridor Activity where students from schools are asked to draw what they want the road or school crossing to look like. These pictures will be represented at community scoping and alternative development meetings.
- School children and their families will be invited to attend the public scoping meetings where there will be project displays catered to children, highlighted displays of the students work and children's activities relating to the project.

B. Assumptions

None

C. Work Product

- Children pictures
- Up to 4 Meeting display boards catered to children's interests
- Presentation materials
- Summary report of school project.



38E 3 – City Stakeholder Meetings

A. Description of Activity

- The establishment of a stakeholder forum with clearly established goals, roles and rules and realistic understanding of their decision-space would help 1) create ownership of the project, 2) provide a forum for data and information sharing, 3) encourage the sharing of ideas and solutions, 4) develop consensus between stakeholders, 5) coordinate projects and efforts and, 6) strengthen relationships between UDOT, the cities, counties, school district and local businesses. Training will also be a part of our stakeholder forum.
- Potential Stakeholders include representatives from the city (s), county (s), developers, utility companies, irrigation companies, farmers, MPO, and religious organizations.
- Each stakeholder will be contacted by phone and interviewed in person to assess their project interest and concerns.
- The stakeholder group will be facilitated. Possible meetings could include:
 - o Goals Roles & Rules Kick-off
 - Purpose/ Need & Issue Identification
 - Community impact assessment meeting
 - Understanding of NEPA and 4(f) process
 - Alternatives Workshop
 - o Preferred alternative meeting
 - Project updates

B. Assumptions

Provide appropriate assumptions about number and length of meetings.

C. Work Product

- Stakeholder Feasibility Report
- Meeting Minutes

38E 4 – Presentations to Local City Councils/Community Groups

A. Description of Activity

- The consultant will make project update presentations to local city councils and community groups over the course of the project to involve and educate elected officials.
- Each city will be contacted with an offer to make a presentation at a city council meeting.
- The consultant will develop all presentation material such as handouts, maps, boards etc.

B. Assumptions

Provide appropriate assumptions about number of meetings.

C. Work Product

- Presentation material (handouts, boards)
- Presentation summary report



38E 5 - Newsletters & Postcards

A. Description of Activity

- 3 newsletters and 3 postcards will be designed and sent to the general public during the project.
- A pre-scoping newsletter will be developed (see Activity 13E-3, Inform Stakeholders of Scoping) and mailed to community members.
- A scoping follow-up newsletter will also be developed and sent.
- A workshop alternative development postcard invitation will be sent to community members and the general project mailing list.
- An alternative workshop follow-up newsletter will be designed and sent to the general public after the completion of the alternative workshops.

B. Assumptions

Provide appropriate assumptions about number of copies for the above material.

C. Work Product

Post cards and news letters

38E 6 – Alternative Development Workshops with the community

A. Description of Activity

- To more fully gain community input, an alternative development solution focused workshop will be hosted. Community members will be given an opportunity to comment on maps, brainstorm solutions and hear what their neighbors feel is important for this project. In addition, this workshop will also be designed to gain input on community values and transportation needs to be used in the development of a community impact assessment (see Activity 27E, Community Impact Assessment).
- Information Packets will be designed and given to each participant. 200 packets per meeting will be developed and will consist of meeting agenda, project newsletter, fact sheets, community values questionnaire etc

B. Assumptions

- Breakout groups will be facilitated by project team members and UDOT representatives
- Provide appropriate assumptions about number of meetings.

C. Work Product

- Workshop summary report
- Community Impact assessment

38E 7 – Focus Groups and Community Interviews

A. Description of Activity

 To better understand the values of members of the represented cities, focus groups will be held to discuss community values (as part of the community impact assessment) and



transportation needs. In addition, personal interviews of key members of the public will also be held.

 Suggestions of participants in the focus groups or interviews will be requested to each City mayor.

B. Assumptions

Provide appropriate assumptions about number and length of meetings.

C. Work Product

Community Impact assessment

Activity 39E - Select Preferred Alternative

A. Description of Activity

- In coordination with UDOT, FHWA, and any participating and cooperating agencies determine the preferred alternative.
- A matrix considering items such as cost, operations, safety, environmental impacts, and public input will be used to select the preferred alternative.
- Public involvement process will be used to gather input from local governments and the public.

B. Assumptions

The preferred alternative will be identified for the EA.

C. Work Product

Preferred alternative evaluation matrix and technical memorandum.

Activity 41E - Receive, Evaluate, and Respond to Public and Agency Input

A. Description of Activity

- The consultant will evaluate and respond to all comments to the EA.
- A comment and response document will be prepared detailing on comments and responses to facilitate review.
- The consultant will incorporate UDOT and FHWA comments to the response document.
- A summary of the comment and responses will be put into the final decision document.

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

Comment and response document.



Activity 43E – Legal Sufficiency Review

Note: This activity only applies if the EA has a non-programmatic Section 4(f)

- A. Description of Activity
 - A Final Section 4(f) evaluation is sent to FHWA to be forwarded for legal review.
 - FHWA comments will be incorporated into the Final 4(f) evaluation.
- B. Assumptions
 - Provide appropriate assumptions about number of copies.
- C. Work Product
 - Final 4(f) Evaluation.

Activity 45E – Prepare Final Environmental Document

Note: This activity is not required for an EA (See Activity 37E, Public and Agency EA Document Review)

Activity 47E - Internal QC/QA of Final Document

Note: This activity is not required for an EA (See Activity 31E, Internal QA/QC of EA)

Activity 49E Submit for Decision

Note: This activity is covered under activity 53E – Submit for Decision

Activity 51E – Public and Agency Final Document Review

Note: This activity is not required for an EA (See Activity 37E, Public and Agency EA Document Review).



Activity 53E – Submit for Decision

Note: The final decision could be a Finding of No Significant Impact (FONSI) or Notice of Intent (NOI) to prepare an EIS. If an EIS is required UDOT will make a recommendation to FHWA on how to proceed forward with the project.

53E 1 - Prepare Draft Decision Document

A. Description of Activity

- If no significant impacts are identified a FONSI will be prepared. If significant impacts
 are identified and NOI to prepare an EIS will be developed. If an NOI is required, UDOT
 will need to decide how to contract the preparation of the EIS for the project.
- A copy of the EA, and any comments from agencies and the public to the EA along with responses to the comments will be provided to UDOT. Based on UDOT's and FHWA review of the material an appropriate decision document will be prepared (FONSI or NOI).
- Incorporate UDOT and FHWA comments to the decision document (FONSI or NOI).

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

Draft FONSI or NOI

53E 2 – Prepare Final Decision Document

A. Description of Activity

- Based on UDOT and FHWA comments to the Draft decision document prepare a final decision document for public and agency review.
- If a FONSI is appropriate, public and agency notice of availability letters and legal advertisement will be prepared.
- If a FONSI is appropriate the document will be placed on the public website.

B. Assumptions

- If a FONSI is appropriate, provide appropriate assumptions about number of final copies.
- Provide appropriate assumptions about number of notice of availability letters to state, federal, and local government agencies.
- Provide appropriate assumptions about number of legal advertisements in newspapers announcing FONSI if this type of document is appropriate.
- If an NOI is required, distribution to agencies and the public and placement in the Federal Register will require a contract modification.

C. Work Product

- Final FONSI or NOI
- Notice of availability letters.



Legal Advertisement

Activity 55E – Develop Concept Report

55E 1 - Prepare Project Concept Report.

A. Description of Activity

Prepare Project Concept Report utilizing inventory data, inventory reports, and preliminary plans completed in previous tasks

- Compile inventory data and reports, possible design exceptions, and project concept
- Prepare cost estimate
- Identify need for environmental clearance for borrow/disposal/staging sites.
- Complete Draft Concept Report which includes a concept report summary.
- Complete Concept Report Summary which contains
 - o Improvements to be made
 - Design exceptions
 - Concept cost estimate
 - o Input from, feedback to, and commitments made to stakeholders
 - Recommended project parameters and design criteria
 - o Project schedule
- Distribute Draft Concept Report to all team members to review for completeness and accuracy.
- Finalize Concept Report

B. Assumptions

Provide appropriate assumptions about number of copies.

C. Work Product

Concept Report

55E 2 – Prepare Preliminary Plans for Preferred Alternative

Prior to the start of this activity, the Preferred Alternative is assumed to be selected. The preliminary plans will be developed in sufficient detail to identify the footprint of the roadway embankment, finalize right-of-way needs and assemble an opinion on construction costs.

A. Description of Activity

Roadway plans will be developed as follows:

- Cross sections every 100 feet
- Locate major cross-drain structures.
- Locate major retaining walls.



B. Assumptions

None

C. Work Product

- 1" = 100' roadway plans on 11" x 17" sheets.
- 1" = 100' (h) and 1" = 10' (v) profiles
- Typical plan sheet
- X-section electronically
- Mainline 50 plan and 50 profile sheets
- Intersection/Cross Streets 20 plan and profile (over/under) sheets
- Typical Section Sheets

Activity 57E - Maintain Administrative Record

A. Description of Activity

- An electronic administrative record will be maintained so that files can be searched. The
 electronic data base will identify all files entered into the system and include all reference
 material.
- All notices, contacts, deliverables, and consultation will be included in the administrative record.
- Hard copies will not be scanned into an electronic format but will be placed in the paper file
- The data base will track the hard copy file system.

B. Assumptions

 The final administrative record will be delivered in hard copy with an electronic data base identifying all material placed into the record. The electronic data base can be searched to find records.

C. Work Product

Administrative record.

